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Profile

February 1979

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Tear 'em down, put 'em up page 12

Watch for readership survey

Counselors' corner:

Since my arrival here, I have noted with interest your many fine comments and complimentary remarks about PROFILE. It's obvious from the many requests for the magazine we receive, it is beneficial to counselors and other educators and does help make your jobs a little easier.

Shortly, some of you will be receiving a readership survey to help in assessing PROFILE, its features and usefulness to you. Survey results will be used to better justify continued publication of PROFILE and its expansion, but most importantly, your suggestions will help determine what type of photofeatures you'd prefer in future issues. Instructions will be included and I ask your assistance in completing and returning it before the end of the school year.

Your cooperation will be greatly appreciated.

Profile

February 1979

Vol. 22, No. 4

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Back cover by Jack Taylor

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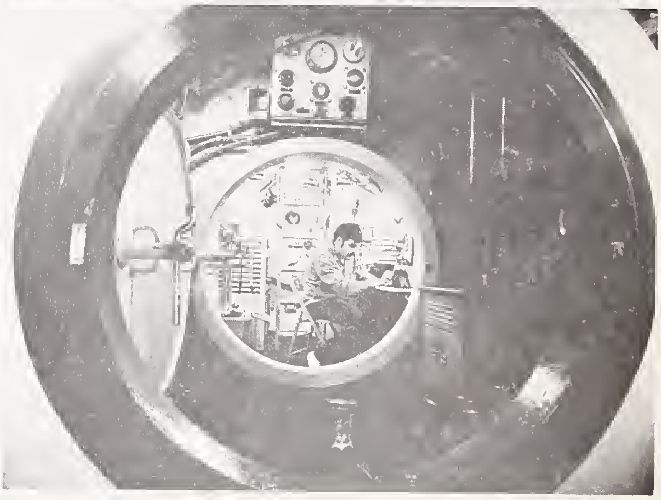


A quick look at
Navy Hull Techs

Hull Maintenance Technicians, known as HTs, do the metalwork and carpentry necessary to keep all types of shipboard structures in good shape. They are the ship's plumbers, small boat repairmen, ventilation system mechanics and also help with firefighting and damage control.

HTs take training at Navy schools in San Francisco, San Diego or Philadelphia. They may work aboard ship or in repair shops ashore (shore jobs are open to women). HTs should have good manual dexterity, vision and color perception, the ability to use tools, equipment and machines, and the willingness to work in team operations.

What they do:

Install, maintain and repair valves, piping and plumbing system fittings and fixtures.

Repair decks, structures and hulls by welding, brazing, riveting and caulking.

Work with light and heavy gauge metal such as aluminum, stainless steel, sheet copper and brass, steel plates, sheet and corrugated iron.

Heat-treating, hot and cold forming of metals.

Pipe-cutting, threading and assembly.

Maintain and repair ventilation systems.

Inspect and repair survival equipment, hatches, valves, watertight doors and scuttles.

Information courtesy of the Navy Career Guide 1977-78.

Academic areas at the Presidio of Monterey, Calif.

More than a language school

By Carol Nelson
Photos by C. D. Steen

A quick frown tracks across the forehead of the young Army private. He has never listened so hard in his life as the instructor explains the assignment. Questions are asked and answered, new phrases and vocabulary are rolled around.

Not a word of English has been exchanged since he and six other students sank into chairs around a table.

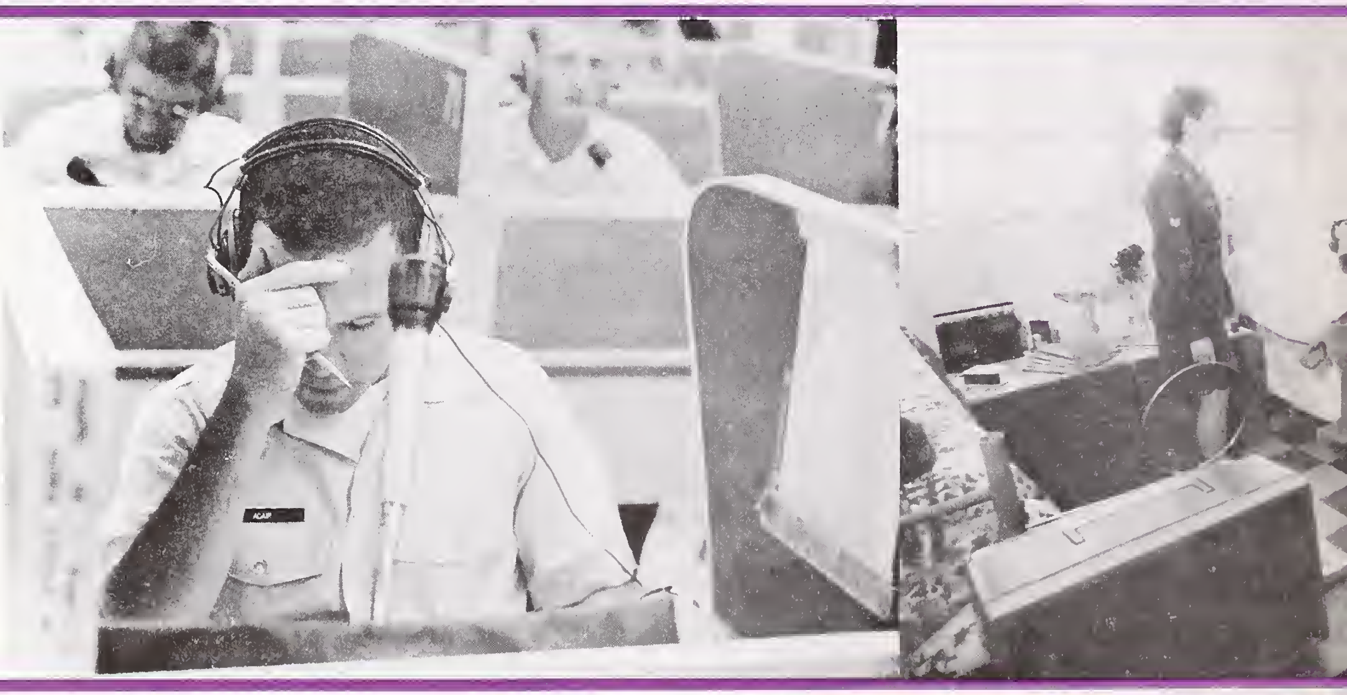
Plunging each class immediately into the sounds and flavors of foreign languages is a time-honored teaching method at the Defense Language Institute Foreign Language Center (DLIFLC) on California's Monterey Peninsula. In the quiet, campus-like surroundings, the system works. Almost before they realize it themselves, students from the armed services and federal agencies are speaking, translating, even thinking in a new language.

Russian...Chinese...German...Arabic...DLIFLC currently offers about 30 courses in language skills needed in intelligence and security fields. The lists varies from year to year, depending on where U.S. troops are stationed or the government needs linguists to support defense operations.

"You can spot language students right away by the earphones they always carry," laughs an Air Force man who is taking Korean. Earphones, tape recorders and piles of textbooks follow students all during the 26 to 47 weeks they spend at Monterey.

Time is divided into blocks for classroom sessions (up to six hours daily), language lab practice and homework. It is estimated that one to two weeks of college level instruction are crammed into each six-hour academic day—that's a tough pace which takes a strong commitment to hitting the books every night. Except for necessary military duties, students are free to concentrate on learning.

DLIFLC's approach is as personalized as possible, usually grouping less than 10 people per class. "Really, you feel like a class by yourself," remarks an Army



(Facing pages—left to right) An Air Force student listens to taped conversations in the language lab. Dormitory-like rooms in the barracks show personalized touches. Close contact with teachers reinforces each day's lessons.

lieutenant. "We get so much individual attention and conversation with the teachers."

In fact, after the first segments of instruction which introduce grammar and pronunciation, some courses can be finished ahead of time if students follow self-paced schedules.

"Self-paced is not self-taught," explains one of the teachers. "We encourage everyone to progress at a comfortable rate, according to ability and aptitude. Some people are better at mimicking sounds than others. Some pick up reading and writing earlier. But the teacher is there to help at every step of the way."

The focus is on spoken language, learned at normal conversational speed through listening, repeating, memorizing, and engaging in conversations. "Textbooks for the ear," recorded by school faculty, are used in language labs and checked out to take back to the barracks for homework study. Videotapes of television shows produced in foreign countries give students a chance to observe native speakers and note gestures and expressions that go along with speech.

Adding bits of culture comes naturally to the school's large civilian faculty. Nearly all are native speakers of the languages they teach; some are fluent in several languages.

"Culture and language are inseparable," comments a Czech instructor. "We even tell jokes, because understanding what a culture laughs at or how they use slang is important."

"So is reading newspapers," adds a student. "You can pick up a lot about a country by watching what they put on the front page."

Since language-trained people in the military often work with tactical equipment and situations, the school set up ''realia'' rooms. Miniature airports, harbors and battlefields give students an opportunity to learn foreign military terms, or listen to air traffic control instructions. This phase of instruction is sometimes continued at other service schools across the country.

DLIFLC grads work as interpreters, intelligence intercept operators, security specialists or attaches in the United States or overseas. Most use their languages as a daily part of their job assignments, but to be sure they keep up a high level of proficiency, DLIFLC offers intermediate and refresher training and correspondence courses.

''Language can be a very perishable skill,'' points out a recent graduate. '' It needs constant practice and use or it decays.''

Relaxing outside between classes, a group of students is comparing notes—

''It seems like I've been here forever—and I've got four more months to do,'' a Marine corporal says.

''Yeah, I hear you. But it's worth it...you know what? Last night, I **dreamed** in Spanish!''

That's the whole idea.

Two students stroll to class through the school's oriental garden.

Navy ABs have an arresting job

An Aviation boatswain's mate aboard an aircraft carrier gives the signals to get the jets airborne. (Photo by PH2 Bob Weissleder)

Whenever Theodrick Seals of Louisville, Ky., hears an aircraft, he looks up—no matter where he is.

It's a good habit. As an Aviation Boatswain's Mate (Navy rating AB), Seals supervises a crew of aircraft handlers on the aircraft carrier, USS Constellation. He is at the top of his specialty and can oversee any of the three-fold jobs of the AB rating: moving and aligning the planes on the catapults, refueling aircraft, and operating the catapult and arresting gear used to launch and recover the powerful jets.

Seals' aircraft handlers operate without voice communication, using special hand signals or colored light wands at night to give instructions to the pilots and other people on deck. They can almost carry on a conversation without exchanging words. Directing planes can be dangerous: the men must be constantly wary of getting too near any of the moving parts of the aircraft (wing flaps, tail hook, doors, for example) or the large intakes and exhausts.

Two stories down, on the hangar deck, handlers ''park'' the multi-million dollar aircraft. About 45 planes share an area the size of a dozen tennis courts with helicopters, tow tractors, spare engines and other equipment. This is where the major maintenance is done to ensure that the aircraft are ready for flight.

With steam curling over the deck, Navy jets line up for launching from the Constellation's catapults. (Photo by PH2 Bob Weissleder)

Buffeted by sharp winds—the aircraft require a minimum of 25 knots (about 30 mph) of wind across the deck in order to land safely—a team of ABs responsible for gassing the planes awaits the incoming fighters. Fueling aircraft at sea involves pulling a hose from a reel, opening a series of valves, taking samples of the fuel to ensure purity, and hooking the hose nozzle onto a single point pressure refueling receptacle. It takes just a few minutes to fill an aircraft with thousands of gallons of fuel.

One refueler, Charles Newton, of Tenkiller, Ill., says, "Seeing an F-14 hit the deck is like standing out on a cold night without any clothing on. It just gives you chills when you see something that big coming at you, knowing that you're going to be responsible for getting it off again."

As an F-14 Tomcat lands, the pilot jams the throttles to full power just in case his plane's tail hook doesn't catch one of the four arresting gear cables, he will have sufficient power to take off again and come back for another try.

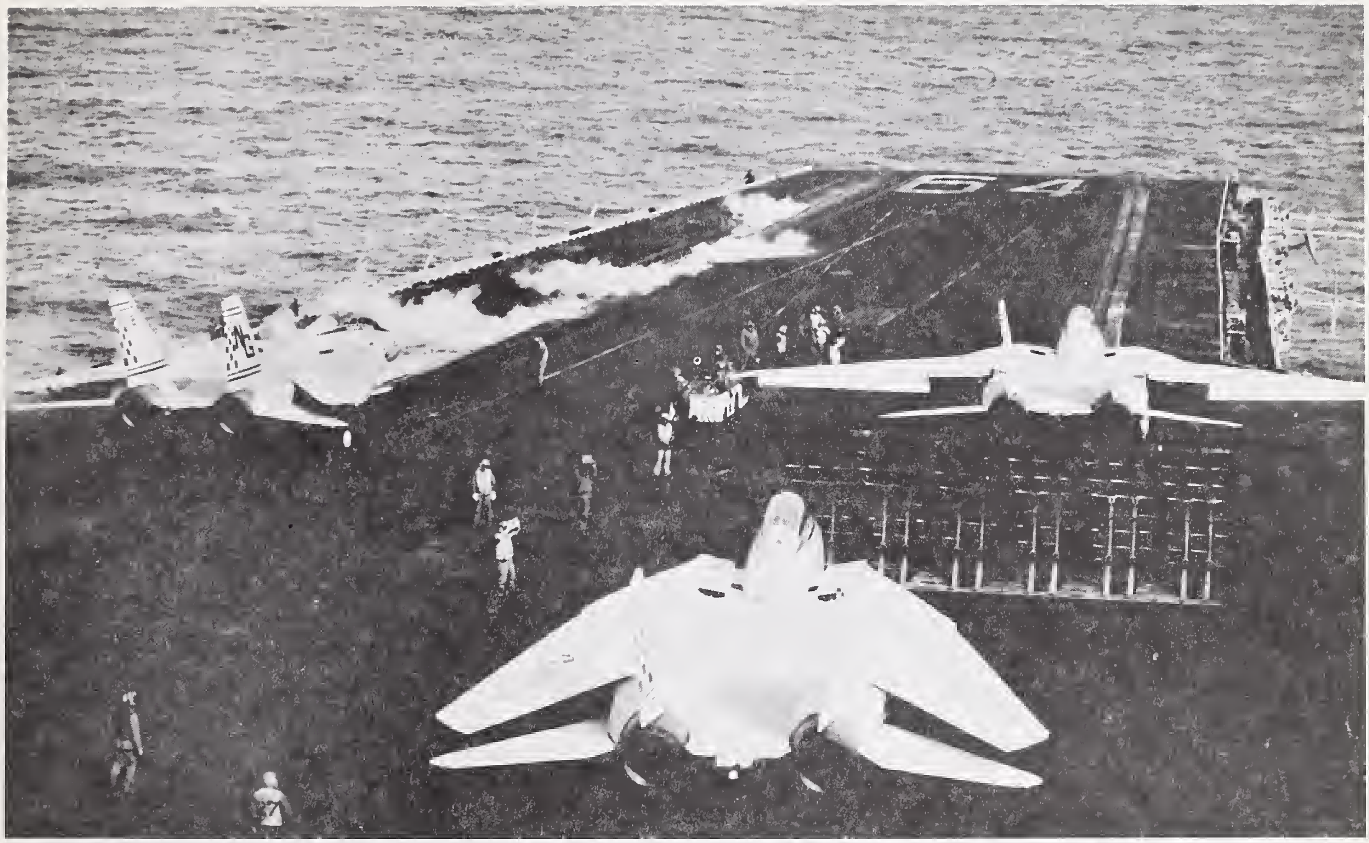
Once the planes land, the ABs note the side number on each. From hand signals given by the pilot as the plane taxies forward clear of the landing area, the amount of JP-5 fuel the aircraft is to receive is determined.

When all aircraft have landed and are parked, the flight deck becomes a kaleidoscope of yellow, green, blue and purple jerseys. The color of their jerseys indicates the men's jobs on the flight deck.

Those in yellow jerseys are responsible for directing the movements of all aircraft about the deck, while those in blue jerseys move the aircraft under the watchful eyes of the directors—either by tractor or by manually pushing them—and ensure that the planes are properly chocked and securely tied down in the right spot.

Green-jerseyed men maintain the catapults and arresting gear. The equipment that controls the arresting cables stretched across the after portion of the flight deck is critical. The wire that stops the jets from going over the side and into the water is mighty thin. But each landing—sometimes referred to as a "controlled crash" because of the impact—is coordinated individually according to aircraft type and weight. The cable, checked and rechecked for proper working order, is set electrically for tension. Each cable is capable of bringing an aircraft from 125-130 knots (140-150 mph) to a dead stop in two and a half seconds using just over 300 feet of deck space.

Likewise, the catapults must be maintained precisely. Since catapulting is the only method of launching the



Working out of his seagoing gas station, an AB pumps jet fuel into an A-7E Corsair II in preparation for another flight. (Photo by PH2 Bob Weissleder)

heavy jet aircraft into the air, maintenance of this machinery is especially important. Not only the safety of the aircraft, but the lives of the people on board the aircraft rest in the proper working of the machinery at all times. This can involve one person or as many as fifteen people, depending on the type aircraft involved.

The men in purple refuel the aircraft and ensure the proper operation of the fuel system throughout the ship. The security and integrity of the fuel tanks for storing millions of gallons of jet fuel is part of their job also.

Everyone who works on the flight deck is thoroughly trained in fire fighting techniques so that, should a crash occur or a fire break out on deck for any reason, all members of the flight deck crew can cooperate to the fullest in containing the blaze with a minimum of damage to the ship and the expensive aircraft.

The Constellation can launch four jets within a 30-second cycle from the four steam-driven catapults. Pulled down the 260 feet of runway, the planes accelerate from zero to a take-off speed of 150 mph in almost two seconds. All flight deck ABs who work so close to the deafening take-offs must wear "Mickey Mouse ears" (sound attenuating helmets such as those in the photographs) for protection.

The fundamentals of aviation and technical skills needed in this rating are taught at the Navy school at Lakehurst, N.J. About 4,600 men and women perform in the AB rating, mostly outdoors in all sorts of weather, on air station flightlines or on the decks of aircraft carriers. Without them, the Navy's planes would not enter the sky and return for yet another mission.

Ed note: This article was adapted from a series of features on Aviation Boatswain's Mates written by Scott Day of the Navy Public Affairs Center, San Diego, as well as other sources.

Sergeant Danny L. Knight, 22-year-old instuuctor at the Second Combat Engineer Battalion's K-9 range, goes over landmine detection procedures before students tackle clearing a mock mine field.

"...a chain of su

Story and photos by Tony Delgado

The hot humid North Carolina air is still. Sand fleas nip at the sweaty brow of a Marine moving slowly down a sandy pine needle-covered path. His eyes are riveted to the ground in front of the metal detector extended from his hands. His ears, covered by earphones, listen for a distinct beep-beep, that will tell him he has found his deadly quarry...a land mine.

Far across the sprawling Marine Corps base of Camp Lejeune, another Marine is seemingly dwarfed on a huge bulldozer shoving chunks of terrain from place to place. A few yards away a great crane-necked scoop shovel gouges into the sandy landscape...enlarging a landing zone for helicopters.

These Leathernecks of the Second Combat Engineer Battalion, Second Marine Division, are a proud bunch. Each trained in a number of related jobs, they are a part of a battalion having a variety of skilled units, al mutually supporting.

A combat engineer student contemplates his next move in disarming an anti-personnel mine during training at Camp Lejeune, N.C.

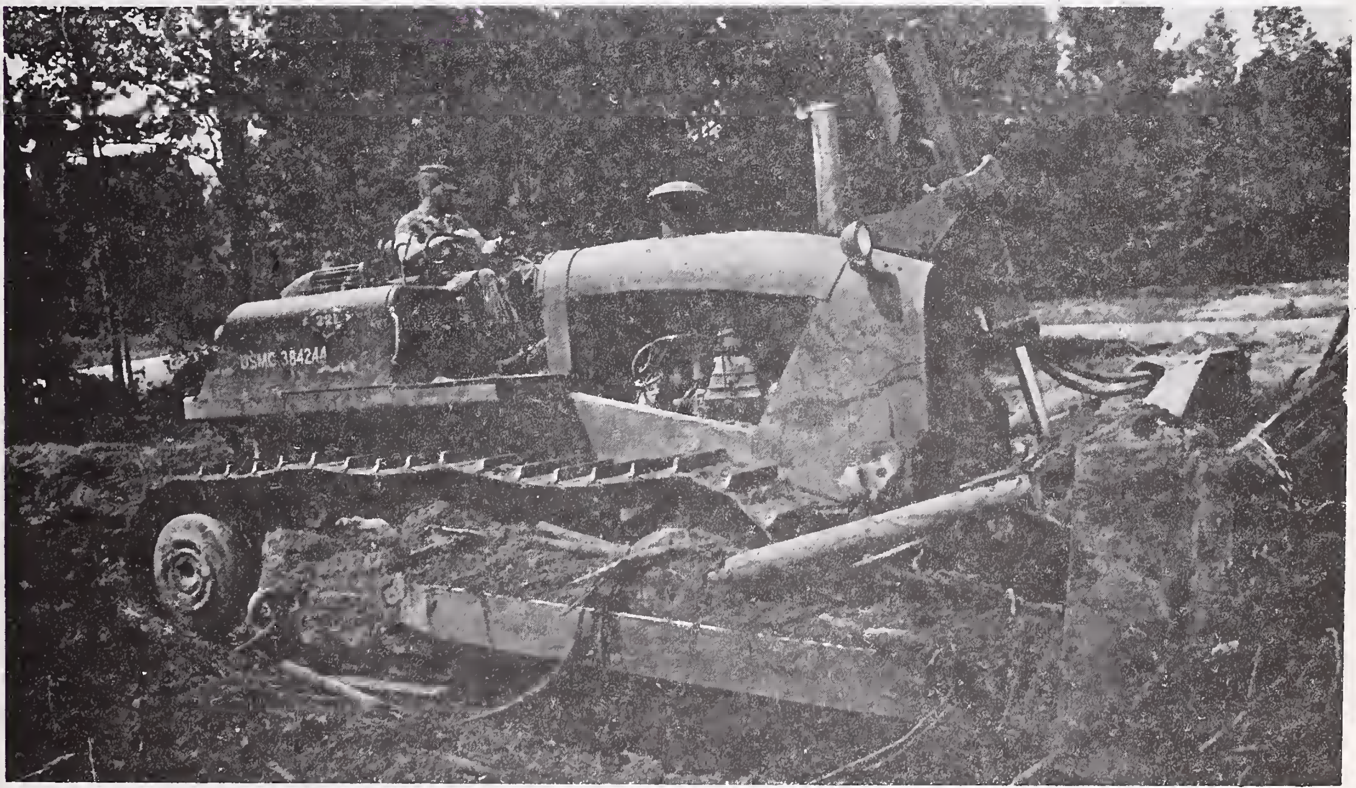
pport..."

The battalion is composed of electricians, carpenters, heavy equipment operators and basic combat engineers. Each engineer comes from boot camp to attend a six-week school on the thickly pine tree-covered base.

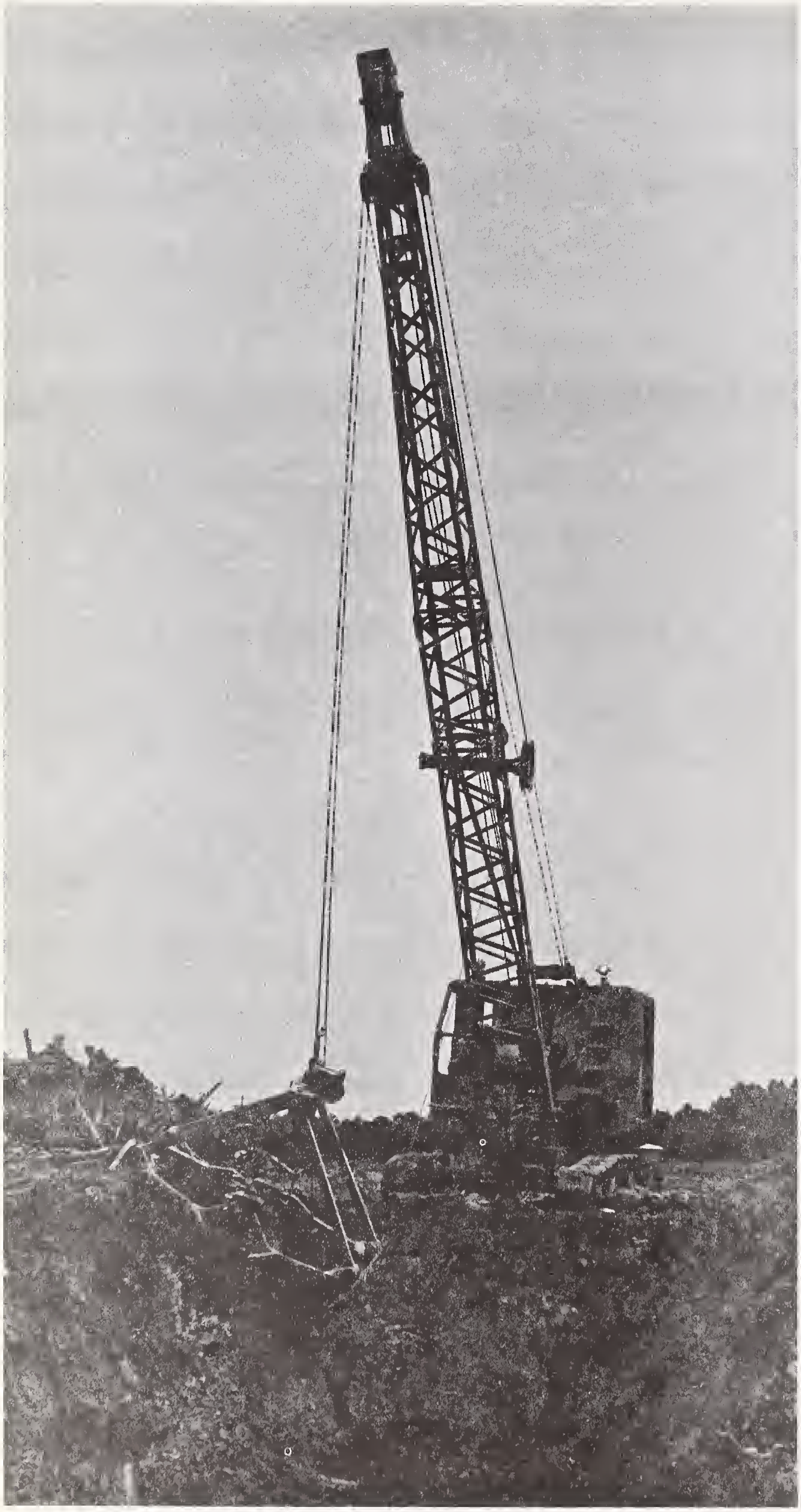
The training received by these Marines, as explained by Major H. L. Dietz, battalion executive officer, is aimed at providing close combat support to the infantry, giving the ground Marine a greater mobility and increasing his survivability in combat.

"We accomplish this by clearing mine fields, building bridges, improving roads, putting in trenches, improving fox holes and building bunkers, all under some pretty hostile conditions," notes Dietz.

Along with increasing the mobility of friendly forces the battalion provides a rough road for the enemy. "As part of our 'counter-mobility' concept, we put



Guiding his bulldozer blade carefully, Private J. E. Gaskill (here and above), cuts up the sandy terrain of Camp Lejeune to enlarge a helicopter landing zone.



One of the largest pieces of heavy equipment used by combat engineers is this great crane-necked scoop-shovel.

in mine fields, build tank obstacles, bunker complexes and defensive positions."

They can build mountains or tear them down. But the engineers' primary job doesn't really come into full play until combat. So for the peacetime Marine, work is sometimes very far ranging.

"He's always busy," says Warrant Officer Wesley W. Bailey, battalion construction officer. "We always have a platoon of Marines at sea with an infantry battalion in training, and another platoon getting ready for replacement." This kind of inter-training between battalions gets the combat engineer familiar with his combat role.

In conjunction with these training deployments, and sometimes during them, the combat engineer has been involved in many public assistance programs over the years. Restoring an orphanage in Malta, repairing a bridge in Crete or assisting in earthquake relief in Peru are examples of projects completed.

"One advantage to this work," says Dietz, "is a Marine can see the results of his work when it's finished. When we are really busy, the battalion's unauthorized absence rate is almost zero. These guys just love to work," he concludes with a broad smile.

For the new combat engineer the weeks of training at Camp Lejeune are tough and demanding. Some of the material covered includes demolitions, field fortifications, land mine warfare, camouflage, construction (carpentry), bridging and rigging.

Sergeant Danny L. Knight, an instructor at the battalion's K-9 range, boasts with pride and confidence about his students.

"Ninety-five percent of the Marines undergoing training really have it together when they leave here." says the 22-year-old West Virginia native.

Marines of combat engineer battalions are skilled, highly trained and valuable to the Marine Corps team. Perhaps Lieutenant Colonel J. G. Dixon, the battalion commander, describes the combat engineer role best. ''It's a chain of support—one guy supporting one guy, supporting the next guy, all in support of the ground Marine.''

Combat engineers are trained in a variety of skills, such as carpentry, that are mutually supportive for their mission of supporting the ground Marine.

Corporal Curlee Benjamin, 28-year-old Florence, S. C., native, performs welding work as part of his duties with the engineer battalion.

Teamwork is encouraged by ATTC.

Get your to co

Story by SNPA Dick Wehn
Photos by PA2 Jim Graham

Nestled quietly among the pines and plains of northeastern North Carolina is the sleepy town of Elizabeth City. This small, rural town, swept by gentle sea breezes, is the home of the Coast Guard's largest air station. It is also the site of the Aviation Technical Training Command (ATTC), one of the newest school commands in the Coast Guard.

This newly-formed command is responsible for basic and advanced training for Aviation Structural Mechanics (AM), Aviation Electricians's Mates (AE), Aviation Electronics Technicians (AT), and Aviation Machinist Mates (AD). Of the aviation ratings, only Aviation Survivalmen (ASM), are still trained by the Navy at Lakehurst, N.J.

The most up-to-date test equipment available is used in the modern labs.

ols and me to shop

One student, Fireman Roy Dunham, of Miami, said of the 20-week AM school, ''This is 100 percent better than a civilian trade school. All the equipment is brand new and the instructors are very helpful. They care about each student.''

The structural mechanic students learn the theories and principles of hydraulics, hand tools and hardware, welding, corrosion control and fiberglass repair. Then they get a chance to put their new-found knowledge to use in the shop, working on the same equipment they will find in the field. It is not unusual for the class to come back from lunch to find written on the blackboard: ''Get your tools and come to shop.''

Along with the AMs the AEs were previously trained at a Navy school in Memphis, Tenn. Senior Chief Aviation

Students design and test their own circuit boards.

SNAT Mona Southway feels her lack of electronics background helped her through the course.

Electrician's Mate, D. G. Lowen said, "This is the first class to be trained completely on Coast Guard Equipment. That means graduates will be able to jump right in when they get to their duty stations. They won't need to spend time retraining on different equipment."

AE students spend 20 weeks learning basic math, basic electricity and aircraft systems, using the most modern training aids available. The AE school uses more than 400 training films, an elaborate slide presentation system, a modern print shop, and state-of-the-art test equipment. Chief Aviation Electronics Technician Douglas Lane says, "We can make all our own training aids right here, including all the textbooks."

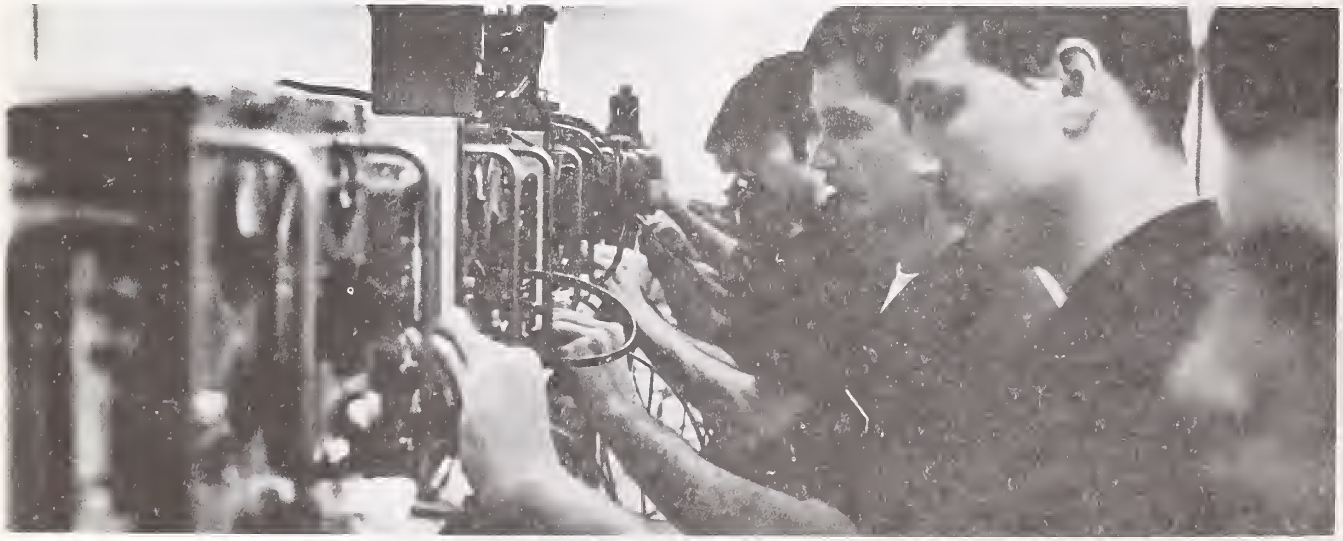
Unlike the other aviation schools, the AT school in January began to get half of its students directly from boot camp and the rest from the field. The other schools continue to get almost all of their students from the field.

In 28 weeks ATs learn basic and advanced electronics and the principles of electronic equipment. They then go into the labs across the hall, where they use the most up-to-date test equipment available. In the words of one instructor, "No expense was spared when we equipped this place."

For 18 weeks, AD students study math, physics, electricity, aerodynamics, publications, ground handling, corrosion control, tools and hardware, engines and related systems.

Although their primary responsibility is the plane's engines, Senior Chief Aviation Machinist's Mate J. J. Guthrie said, "The plane captain is usually an AD, responsible for the before and after flight safety checks, and the safe operation of the plane in the air."

Instuctors at ATTC are all volunteers, who have been carefully screened and then trained at the Instructor Training School at Governors Island, N.Y. The atmosphere



Classroom instruction is given on electronic equipment used in the field.

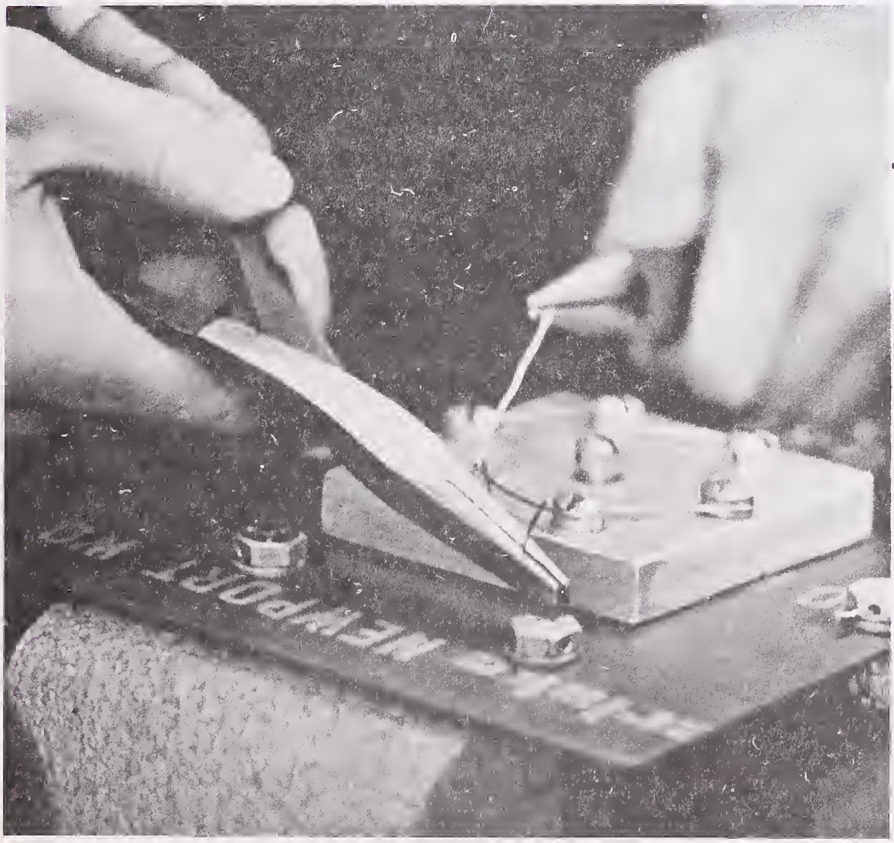
at ATTC is a subtle blend of college, trade school, and enough military to keep things running smoothly. Fireman Ed Colvin, from Deer Park, Wash., said, "All the instructors are willing to put in extra time and effort to make sure that we learn everything."

The only woman student at ATTC at this time, Seaman Aviation Electronics Technician Mona Southway, of Grand Lake, Col., said, "I didn't have any previous experience with electronics, but I think that helped, because I learned everything fresh and didn't have to re-learn anything." The school has graduated several women, and all reports say they are doing as well, or better than the men. The schools welcome women applicants, but so far, very few have requested them.

The multi-million dollar facility, combined with concerned, interested instructors, adds up to a top notch, professional institution that will provide resourceful men and women, ready to carry out the missions of Coast Guard aviation.

Coast Guardsmen Seaman Photojournalist Dick Wehn and Photojournalist Second Class Jim Graham are assigned to the Fleet Home Town News Center, Norfolk, Va.

Close inspection reduces the chance of errors.



Safety wiring prevents vibration from loosening bolts in flight.

What's it all about?

By Aaron Williams
Photos by Tony Delgado

As the two F-106 Delta Darts thunder down the runway, lift off into the overcast sky, Captain Charles Morris turns and says, "that's what it's all about."

What it's all about is the business of air defense of the United States. The 48th Fighter Interceptor Squadron (FIS), Langley AFB, Va., is just one of six units of the Aerospace Defense Command charged with this mission. The 48th must investigate any unexplained intrusion into U.S. airspace and be a highly trained first line of defense against the possibility of hostile air attack.

Units are on duty 24-hours a day, every day of the year. Pilots and crew chiefs eat and sleep closer to their aircraft than most people do the family car. These photographs depict, a portion of a day on alert.

A little levity breaks into the morning briefing attended by pilots of the 48th Fighter Interceptor Squadron. Overseeing the proceedings is "Taz," the squadron's emblem, a Tasmanian devil.

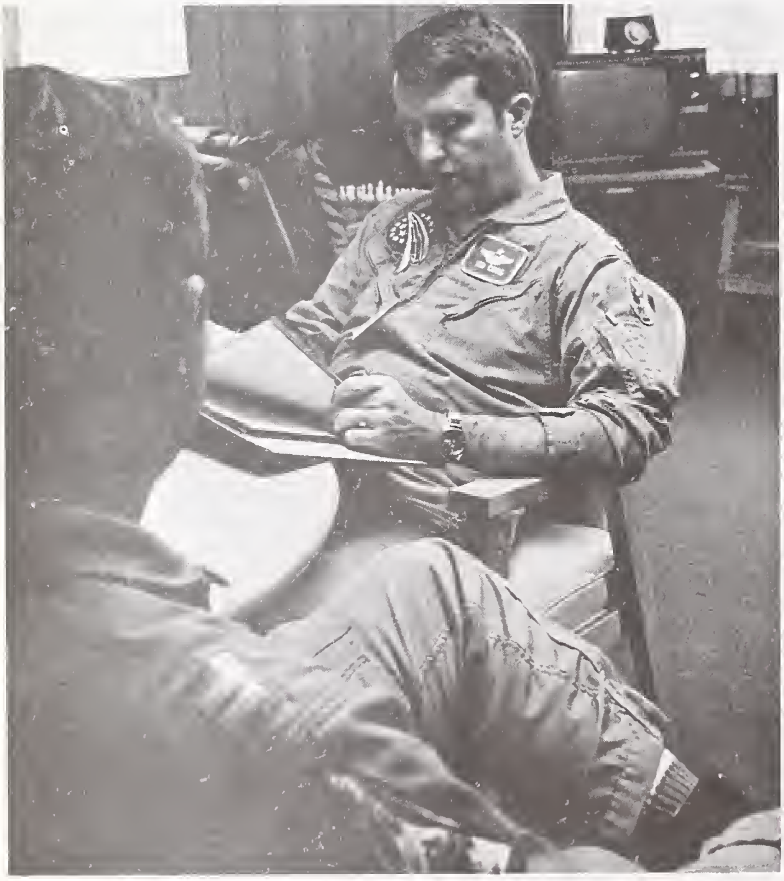
After the briefing Captain Charles Morris picks up flight gear before reporting for alert duty.

Entrance to the alert area is tightly controlled.

Inspection

Airman First Class Don Huffman, crew chief, makes a complete check of the aircraft before it is placed on alert.

As with other Air Force jobs, flying an airplane generates paperwork. Capt. Morris completes pre-flight forms after the inspection.



Alert pilots, Lieutenant Colonel Ted Cors and Capt. Morris go through intercept procedures.

How did these airmen get into the "greatest occupation in the world?"

Lieutenant Colonel Robert Atwater, 48th FIS commander, urges those interested to develop a spirit of determination and a special attitude toward flying. He states he can foresee the day when women will be flying alongside men on intercept missions. "The only thing holding them back now is the law against women in combat," he emphasizes.

He further says young people coming into the Air Force today are much more intelligent and more aware of what's going on than the majority of their predecessors.

"They ask why, rather than accept something at face value, which I feel is a healthy attitude. I am particularly impressed with the maturity and presence of today's young officer."

Capt. Morris, pilot, echoes these sentiments about his crew chiefs. "They are extremely dedicated and highly trained. When I pre-flight an aircraft, my crew chief has already corrected any minor discrepancies that might have been there. He tells me what's wrong, I don't find it."

Airman First Class Don Huffman, crew chief, is proud of his job. "The Air Force gave me what I wanted and has taught me everything I need to know about this job. It's the best in the world."

The klaxon sounds and Capt. Morris is on his way. Aerospace Defense Command allows pilots five minutes to be airborne after alerted.

Members of the 48th take pride in beating the five minute mark. Captain Rick Zoerb has a time of two and one-half minutes.

A1C Huffman makes a final visual check as aircraft leave hangars for take off.

[illegible] Captains Rick Zoerb, [illegible] members of the 48th [illegible]

[illegible] photographer's [illegible]

*U.S. GPO: 1979—635-031/5 REGION NO. 3-II

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FLARE

Air Force on alert
page 20

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